

## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (currently amended) A computer-implemented method of characterizing objects generated during at least a partial run of a program, each object ~~being characterized by a plurality of alternative properties which can be selected~~ comprising a plurality of potential alternative properties, said method comprising:

a) instrumenting said at least partial run of said program to determine characterization information about each of said objects;

b) determining a desirable property for said objects;

c) ~~determining a correlation between said desirable property and said characterization information for each of said objects~~ a desirable one of said potential alternative properties for said objects;

c) determining a correlation between said ~~desirable property~~ desirable one of said potential alternative properties and said characterization information for each of said objects;

d) using said correlation to select ~~an property~~ among the alternative properties for an object subsequently created during an at least partial run of said program based upon characterization information about the subsequently created object.

2. (currently amended) A The method as set forth in claim 1, wherein the determining of an initial property in step (b) is carried out by minimizing total cost of interaction among components during at least a partial run of said program.

3. (currently amended) A The method as set forth in claim 1, wherein said characterization information of an object comprises at least one of said object's class, classification of said object's creator object, and a code identification of said object's creation site.

4. (currently amended) A The method as set forth in claim 1, wherein said alternative properties comprise a string representation selected from ASCII, EBCDIC, and UNICODE.

5. (currently amended) A method as set forth in claim 1, wherein said alternative properties comprise a data structure selected from hash table, tree, and compressed data structures.

6. (currently amended) A computer readable medium including computer instructions executable on a computer for carrying out a method of characterizing objects generated during at least a partial run of a program, each object ~~being characterized by a plurality of alternative properties which can be selected~~ comprising a plurality of potential alternative properties, said method comprising:

a) instrumenting said at least partial run of said program to determine characterization information about each of said objects;

b) determining a desirable property for each of said objects;

c) ~~determining a correlation between said desirable property and said characterization information for each of said objects~~ a desirable one of said potential alternative properties for said objects;

d) using said correlation to select ~~an property~~ among the alternative properties for an object subsequently created during an at least partial run of said program based upon characterization information about the subsequently created object.

7. (currently amended) A The computer readable medium as set forth in claim 6, wherein the determining of an initial property in step (b) is carried out by minimizing total cost of interaction among components during at least a partial run of said program.

8. (currently amended) A The computer readable medium as set forth in claim 6, wherein said characterization information of an object comprises at least one of said object's class, classification of said object's creator object, and a code identification of said object's creation

site.

9. (currently amended) A The computer readable medium as set forth in claim 6, wherein said alternative properties comprise a string representation selected from ASCII, EBCDIC, and UNICODE.

10. (currently amended) A The computer readable medium as set forth in claim 6, wherein said alternative properties comprise a data structure selected from hash table, tree, and compressed data structures.